

SAFETY DATA SHEET

4215 Heatresistant aluminum finish

1. Identification of the preparation and of the company

Product name and/or code : 4215 Heatresistant aluminum finish
Product use : Andrews Coatings Ltd. Carver Building, Littles Lane
Manufacturer : Wolverhampton, West Midlands, WV1 1JY
 Telephone Number: 01902 429190, Fax Number: 01902 426574
Emergency phone: : Email: sales@andrewscoatings.co.uk

2. Composition/information on ingredients

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name*	CAS no.	%	EC nr.	Classification
United Kingdom (UK)				
Naphtha (petroleum), hydrotreated heavy	64742-48-9	10 - 25	265-150-3	R10 Xn; R65 R66
Isoparaffines C8-C10 mixed, boilingrange 115-145	90622-56-3	10 - 25	292-458-5	F; R11 Xn; R65 Xi; R38 R67 N; R51/53
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	5 - 10	265-185-4	R10 Xn; R65 R66 N; R51/53
1,2,4-Trimethylbenzene	95-63-6	0 - 1	202-436-9	R10 Xn; R20 Xi; R36/37/38 N; R51/53
Octane	111-65-9	0 - 1	203-892-1	F; R11 Xn; R65 Xi; R38 R67 N; R50/53
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
 R66
 R52/53
Physical/chemical hazards : Flammable.
Human health hazards : Repeated exposure may cause skin dryness or cracking.
Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

First aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.
Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.
Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

4. First aid measures

- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
Not to be used : water jet.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.
- Hazardous combustion products** : Decomposition products may include the following materials:
metal oxide/oxides

6. Accidental release measures

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
- Spill** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Preferably clean with a detergent. Avoid using solvents. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits.
- In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
- Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
- Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.
- Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Put on appropriate personal protective equipment (see section 8).
- Comply with the health and safety at work laws.
- Storage** : Store in accordance with local regulations. Observe label precautions. Do not store above the following temperature: 35°C (95°F). Store in a cool, well-ventilated area away from incompatible materials and ignition sources.
- Keep away from: oxidizing agents, strong alkalis, strong acids.
No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not empty into drains.

8. Exposure controls/personal protection

- Engineering measures** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
United Kingdom (UK)	
Naphtha (petroleum), hydrotreated heavy	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine STEL: 850 mg/m ³ 15 minute(s). STEL: 150 ppm 15 minute(s).
	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine TWA: 566 mg/m ³ 8 hour(s). TWA: 100 ppm 8 hour(s).
Isoparaffines C8-C10 mixed, boilingrange 115-145	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine STEL: 850 mg/m ³ , 0 times per shift, 15 minute(s). STEL: 150 ppm, 0 times per shift, 15 minute(s).
	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine TWA: 566 mg/m ³ , 0 times per shift, 8 hour(s). TWA: 100 ppm, 0 times per shift, 8 hour(s).
Naphtha (petroleum), hydrodesulfurized heavy	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine (150 ppm) STEL: 850 mg/m ³ , 0 times per shift, 15 minute(s).
	EH40-WEL (United Kingdom (UK), 6/2005). Notes: as Turpentine (100 ppm) TWA: 566 mg/m ³ , 0 times per shift, 8 hour(s).
1,2,4-Trimethylbenzene	EH40-WEL (United Kingdom (UK), 1/2005). TWA: 125 mg/m ³ 8 hour(s). TWA: 25 ppm 8 hour(s).

Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Recommended: When spraying wear suitable respiratory equipment : organic vapor (Type AX) and particulate filter (EN 140).
- Hand protection** : >8 hours (breakthrough time): For prolonged or repeated handling, use the following type of gloves: nitrile rubber or polyvinyl alcohol (PVA) (EN 374-1).
- Eye protection** : Recommended: safety glasses with side-shields (EN 166) .
- Skin protection** : Recommended: Wear overalls or long sleeved shirt.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Environmental exposure controls

Do not allow to enter drains or watercourses.

9. Physical and chemical properties

- Physical state** : Liquid.
- Odor** : Solvent-like.
- Color** : Silvery.
- Flash point** : 40 °C
- Boiling point** : > 160 °C
- Explosion limits** : Lower: 0.6% Upper: 8%
- Vapor pressure** : 0.7 kPa (5.3 mm Hg) (at 20°C)
- Vapor density** : >1 (Air = 1)
- Evaporation rate (butyl acetate = 1)** : 0.2 compared with Butyl acetate.
- Volatility %** : 71.8% (v/v), 47.5% (w/w)
- VOC content w/w** : 543 (g/l).
- Solubility** : Partially soluble in the following materials: acetone.
Very slightly soluble in the following materials: methanol.
Insoluble in the following materials: cold water, hot water, diethyl ether and n-octanol.
- Relative density** : 1.21 (Water = 1)

9. Physical and chemical properties

Viscosity	: Dynamic: 600 to 650 mPa·s (600 to 650 cP) Kinematic: 5 to 5,4 cm ² /s (500 to 540 cSt)
pH	: Basic.

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

11. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), hydrotreated heavy	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>15000 mg/kg	-
	LC50 Inhalation Vapor	Rat	>5,5 mg/L	4 hours
Isoparaffines C8-C10 mixed, boilingrange 115-145	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>10000 mg/kg	-
	LC50 Inhalation Vapor	Rat	>4500 ppm	4 hours
Naphtha (petroleum), hydrodesulfurized heavy	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>6500 mg/kg	-
	LC50 Inhalation Vapor	Rat	>14 mg/L	4 hours
1,2,4-Trimethylbenzene	LD50 Oral	Rat	5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours

12. Ecological information

There is no data available on the preparation itself.
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 15 for details.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Naphtha (petroleum), hydrotreated heavy	-	Acute EC50 >1000 mg/L	Daphnia	4 hours
	-	Acute IC50 >1000 mg/L	Algae	4 hours
	-	Acute LC50 >1000 mg/L	Fish	4 hours
Isoparaffines C8-C10 mixed, boilingrange 115-145	-	Acute EC50 >1 mg/L	Daphnia	24 hours
	-	Acute IC50 >10 mg/L	Algae	72 hours
Naphtha (petroleum), hydrodesulfurized heavy	-	Acute LC50 3,2 mg/L	Fish	96 hours
	-	Acute EC50 4 to 10 mg/L	Daphnia	48 hours
	-	Acute IC50 10 to 100 mg/L	Algae	72 hours
	-	Acute LC50 10 to 100 mg/L	Fish	96 hours
1,2,4-Trimethylbenzene	-	Acute EC50 30 mg/L	Daphnia	48 hours
	Mortality	Acute LC50 7,72 mg/L	Fish - Fathead minnow (pimephales promelas)	96 hours

Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Naphtha (petroleum), hydrotreated heavy	< 28 day(s)	-	Readily
Isoparaffines C8-C10 mixed, boilingrange 115-145	-	-	Not readily
Naphtha (petroleum), hydrodesulfurized heavy	-	100%; < 28 day(s).	-

Bioaccumulative potential

12. Ecological information

Product/ingredient name

Naphtha (petroleum), hydrotreated heavy
Isoparaffines C8-C10 mixed, boilingrange 115-145
Naphtha (petroleum), hydrodesulfurized heavy
1,2,4-Trimethylbenzene

LogP_{ow}

4.9 to 6.5
>3
>3
3.8

BCF

-
-
-
-

Potential

high
high
high
high

13. Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.


European waste catalogue (EWC) : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

Hazardous waste : Yes.

14. Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		<p>Hazard identification number 30</p> <p>Remarks Exempted according to 2.2.3.1.5 (Viscous substance exemption)</p>
IMDG Class	1263	Paint.	3	III		<p>Emergency schedules (EmS) F-E, S-E</p> <p>Remarks Exempted according to 2.3.2.5 (Viscous substance exemption)</p>
IATA Class	1263	Paint.	3	III		<p>Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 309</p> <p>Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 310</p> <p>Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y309</p> <p>Special provisions: A72</p>

PG* : Packing group

15. Regulatory information

EU regulations

: The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:

Risk phrases

: R10- Flammable.
R66- Repeated exposure may cause skin dryness or cracking.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

15. Regulatory information

- Safety phrases** : S23- Do not breathe vapor or spray.
S24- Avoid contact with skin.
S43- In case of fire, use DRY chemicals, CO2, alcohol resistant foam or water spray.
S51- Use only in well-ventilated areas.
S56- Dispose of this material and its container at hazardous or special waste collection point.
- Europe inventory** : **Europe inventory:** At least one component is not listed.
- Other EU regulations**
- CN code** : 3208 10 90
- National regulations**
- Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

16. Other information

- CEPE Classification** : 1
- Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : R11- Highly flammable.
R10- Flammable.
R20- Harmful by inhalation.
R65- Harmful: may cause lung damage if swallowed.
R38- Irritating to skin.
R36/37/38- Irritating to eyes, respiratory system and skin.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapors may cause drowsiness and dizziness.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties. ©Copyright by Rust-Oleum Netherlands B.V. / Martin Mathys B.V.



Version	1.01	v.3.4.	Page: 6/6
Date of issue	5-4-2007.		Printed 9-7-2007.



Rustoleum Aerosols, Carver Building, Littles Lane, Wolverhampton WV1 1JY
Tel: 01902 712286 Email: sales@rustoleumaerosols.co.uk
Fax: 01902 426574 Web: www.rustoleumaerosols.co.uk